Index to Vol. XXX.

SUBJECTS.

Adaptability of bees in Nature..... 147
Adulteration of honey.....75, 401, 404, 600, 655, 663, 687, 697, 753, 782, 787, 792, 793, 795..... 824
After-swarms.....109, 570
Alcohol on the brain..... 472
Alsike clover.....180, 214, 338, 473
Analyzing honey..... 423
Ants and bees.....594, 659
Ants in the apiary.....86, 103, 751
Apiarian exhibit at Toronto, Ont..... 503
Apiarian exhibit at World's Fair... 170, 426, 464, 523, 571, 631, 733, 753, 786, 831..... 859
Apiarian exhibits at conventions.....854, 855
Apiarian hummings..... 427
Apiarian ignorance..... 528
Apiarian reminiscences..... 80
Apiarian statistics..... 437
Apicultural experiments.....9, 488, 498
Apicultural experiment station..... 856
"Apicultural literarians"..... 827
Apis dorsata—importing..... 334
Api-thoughts..... 361
Are bees a nuisance?..... 501
Are Italians hybrids?..... 21
Arranging honey in stores..... 660
Asparagus.....100, 214
Average weight of average colony on Nov. 1..... 632
Awful, but true, indictment..... 408

Basswood trees.....201, 205, 275
Bee-caves in Texas..... 332
Bee-culture for health..... 473
Bee-culture in agricultural colleges..... 269
Bee-escapes.....113, 211, 497, 501
Bee-feeders.....19, 492
Bee-hives..... 853
Bee-keeping for women.....537, 693

BEE-KEEPING IN—
Australia..... 526
California.....278, 761, 794, 826
Colorado.....604, 701, 734
Iowa.....308, 495
Kansas..... 725
Maryland..... 798
Michigan..... 733
Minnesota..... 143
Mississippi..... 852
Nebraska..... 826
New Mexico..... 799
North Carolina..... 596
Pacific Islands..... 334
Tennessee..... 820
Texas.....332, 492, 628
Washington..... 405
Wisconsin..... 243

Bee-keepers' terms..... 751
Bee-keepers' Union.....72, 327, 360, 394, 489, 816
"Bee-kings" in California..... 242
Bee-martins..... 140
Bee-notes.....300, 332
Bee-papers..... 724
Bee-questions by a beginner..... 435
Bees and red clover..... 789
Bees are old inhabitants..... 818
Bees as weather indicators..... 87
Bee-scouts selecting a home..... 528
Bees from India.....42, 47
Bees in a candy-store..... 105
Bees in the mails..... 235
Bees in the Tropics..... 575
Bees in water.....574, 661, 761
Bee-smokers.....74, 144, 215, 560
Bees that hear..... 83
Bees that tell time..... 576
Bee-stings.....215, 399, 487, 789, 821
Bee-stings and rheumatism.....562, 606, 729, 797, 799
Bees under the ground..... 47
Bee-supply business..... 169
Beeswax and its uses.....11, 735
Beeswax from old combs..... 693
Beeswax from one hive..... 108
Beeswax rendering..... 340
Bees working at night..... 199
Bee-trees—whose are the bees and honey in them?.....530, 698
Bee-veils..... 337
Beginners and the market..... 496
Benefits of bees to agriculture..... 464

BIOGRAPHICAL—
Atchley, Mrs. Jennie..... 137
Gemmill, Francis A..... 392
Judd, Orange..... 362
Marshall, D. D., Rev. W. K..... 459

Black or German bees compared..... 302
Blue-jays..... 140
British bee-keepers and the World's Fair..... 657
Brood-combs.....83, 566
Brood-rearing..... 852
Buckwheat for honey.....407, 468, 758
Butterflies.....170, 735

Caged queens and queen-cells..... 12
California bee-keepers and the government..... 107
California bee-keeping.....720, 721, 723, 761
Canadian Bee-news..... 666
Can a queen produce life without the aid of a drone?..... 756
Can or do bees hear?.....88, 182, 368, 630, 763
Care of comb honey..... 236
Carelessness..... 234
Carniolan bees.....311, 632
Carrying honey and pollen..... 183
Cause of non-secretion of honey..... 144
Cellars for bees..... 668
Cellar vs. out-door wintering..... 699
Ceylon honey-bees..... 306
Changing air in cellars..... 317
Changing nectar to honey.....440, 789
Chapped hands..... 135
Cheap honey in California..... 703
Chemical analysis and honey adulteration..... 401
Cherry blossoms and bees..... 21
Chicago fire..... 299
Chicago's great week..... 593
Chinese bee-keeping..... 858
Christmas-tree stand..... 830
Cleome..... 753
Clipping queens' wings.....112, 271, 534, 592, 698, 857
Clover..... 601
Columbus' cannon..... 105
Comb foundation makers..... 40
Comforts in the apiary..... 211
Coming bee..... 728
Cork for winter packing.....527, 636
Corn-cobs as an absorbent..... 703
Conser hive patent..... 689
Conservatory bee-keeping..... 688
Convenient height for hives..... 658

CONVENTIONS—
Allegany county, N. Y.....395, 797
Capital..... 605
Carolina..... 829
Colorado..... 602
Cortland Union..... 49
Illinois.....487, 571, 599, 631, 723, 751, 752
Iowa.....233, 463
Michigan..... 723
Missouri..... 177, 853
Nebraska..... 297
North American.136, 141, 167, 199, 231, 277, 719, 785
N. E. Ohio, N. Pa. and W. New York..... 695
Wabash Valley..... 392

Country roads..... 169
Creams and balms..... 135
Criminality of food adulteration..... 787
Cuban bee-keeping..... 273
Cucumber..... 338
Cure for bee-stings..... 604

Dead drones and virgin queens..... 86

DEATH NOTICES OF—
Berry, Mrs. Stephen..... 263
Brenner, Chester..... 691
Garrett, H. W..... 490
Rice, Benj. E..... 234
Stutterd, S..... 430

Decoy hives for stray swarms..... 114
Detroit honey exhibit..... 563
Development of bee-keeping..... 208
Difference in yields of colonies..... 692
Different bees, hives, etc..... 701
Distance bees fly for honey..... 662
Divided colonies as good as from swarms..... 790
Does bee-keeping pay?..... 725
Don't disturb the bees..... 119
Don'ts about bee-keeping..... 20
Drone-bees and their ways.....431, 539, 540
Drone-brood poisonous to chicks..... 375
Drones and electricity..... 424
Drone traps..... 182
Dry sugar for bees.....246, 535

Educating people to be apiarists.....853, 854
Egg-eating dogs..... 608

Eggs of impregnated and virgin queens.....598, 895
Eight-frame hives..... 798
Empty combs.....55, 113, 183, 248, 341, 727
Encouraging "stray straw"..... 88
England and bee-keeping..... 296
Espercette..... 7
Experience with queens..... 492
Experiences in bee-keeping ....17, 54, 83, 86, 151, 277, 339, 341, 428, 469, 504, 788..... 828
Experiment station—bee-keeping..... 765
Extracted and extracting honey..... .....210, 366, 510
Extracting beeswax..... 703
Extracting nectar from unsealed combs..... 333

Fall crop of honey..... 490
Fall work in the apiary..... 500
Feeding and feeders...246, 304, 402, 532, 635, 638, 700, 767, 788..... 820
Feeding for winter..... 540
Feeding sugar syrup..... 861
Field for study..... 724
Field of labor for bee-keepers..... 754
Fighting among the bees..... 208
Finding a black or hybrid queen..... 13
Fire or no fire in bee-cellars..... 699
First weekly bee-paper..... 818
Five-banded golden Italian bees ....2 9, 277, 397, 636, 797..... 821
Flying in a circle..... 624
Forestry building of World's Fair..... 43
Formic acid—its origin, uses and effects..... 605
Foul brood.....175, 212, 400, 459, 666, 733, 763
Foundation fastener..... 20
Foundation in the sections..... 853
Fruit-raising and bee-culture.....109, 119
Fruit-trees and bees..... 576
Fuel for bee-smokers..... .....145, 215
Fumigating comb honey..... 456, 854
Function of the honey-bee—most important..... 600
Future of bee-keeping..... 688

Getting bees out of supers..... 106
Getting bees ready for winter..... 236
Giving due credit.....425, 526
Golden-rod..... .....338, 343, 487
Golden wedding of Mrs. and W. B. McCormick.. 756
Government aid to apiculture.....264, 572, 632
Grading of comb honey.....44, 178, 432
Grafting wax and bees..... 41
Granulation of honey.....11, 84
Grounds for the apiary..... 53
Guadaloupe bees..... 103

Habit of observation..... 639
Hairpins to hold transferred combs..... 337
Handling hives and frames..... 208
Hand-picked drones..... 300
Hard to please..... 297
Have everything nice and clean..... 114
Historic bee-men..... 720
Hiving swarms.....180, 335
Hiving swarms on drawn combs..... 823
Honest pound section..... 117
Honey and bees in a tree..... 115
Honey and queens..... 596
Honey as medicine..... 375
Honey-bee enemy in California..... 72
Honey-candy..... 138
Honey crop a fair average..... 437
Honey crop of 1892.....135, 199, 331, 488
Honey-dew..... 721
Honey drink..... 55
Honey for analysis..... 7
Honey in store windows..... 307
Honey market..... 295
"Honey out of the rock"..... 74
Honey predictions.....85, 175
Honey prospects..... 303
Honey secretion..... 735
Honey-vinegar.....13, 146, 171, 242, 635, 693
Horse-chestnut..... 74
Horticulture and bee-keeping..... 564
House apiary like a passenger car..... 343
How far do bees fly?.....389, 502, 759, 855
How long can bees live on only bee-bread?..... 822
How moths get into hives..... 854
How much honey to feed..... 3 6
How to begin bee-keeping..... 564
How to bring up a son..... 575
Hunger makes honey..... 23
Hutchinson baby..... 424

ILLUSTRATIONS—
Alley's self-hiving arrangement..... 82
Arkansas State building..... 493
Bringing home the bees in his trousers..... 205
California State building..... 435
Dibble automatic swarmer..... 52
Dibble self-hiver..... 16
Forestry building at World's Fair..... 43

Francis A. Gemmill..... 393
Kansas State building..... 563
Michigan State building..... 401
Mrs. Jennie Atchley..... 137
New Heddon feeder..... 305
Ohio State building..... 371
Orange Judd..... 983
Pennsylvania State building..... 755
Perfection bee-feeder..... 639
Stand for comb honey..... 73
Stands for extracted and comb honey..... 267
Stewart honey-box..... 331
To bee or not to bee..... 561
Washington State building..... 469
West Virginia State building..... 819
Wisconsin..... 603
Wyoming..... 657

Improvement of bee-literature.....694, 862
Increase..... .....210, 273
Indications that bees are getting honey..... 467
Inoculation against bee-poison..... 119
Insects and music..... 625
Instinct or reason in bees..... .....74, 730
In sunny southland.....295, 300, 425
Introducing queens .....49, 151, 179, 365, 368, 539, 564, 565, 569, 629, 670, 696, 828..... 851
Inventors and inventions..... 335
Iodine of Potassium for bee-stings..... 215
Iowa bees, and bee lies, in Michigan..... 670
Iowa bee-lawsuit..... 394
Iron-weed..... 337
Italian bees..... 295
Italian bees in combs of the blacks..... 54
Italianizing bees..... 49, 213
Italians mated with blacks.....172, 502
Italian vs. black bees....22, 115, 338, 367, 403, 502, 608, 698, 817..... 857

Kansas honey-plants..... 470
Keeping bees for pleasure and profit..... 532
Keeping bees from annoying at fairs..... 279
Keeping bees on shares..... 398
Keeping fresh meats..... 564
Keeping honey..... .....104, 472, 854
Kentucky's World's Fair exhibit..... 274
Knox county (Ind.) fair..... 330

Langstroth, Rev. L. L., and his head trouble..8, 173, 231, 238..... 327
Langstroth's annuity fund..... 455
Large colonies—are they desirable?..... 632
Large colonies not best for winter..... 754
Larvæ used in grafting queens..... 692
Late drones..... 540
Laying workers.....368, 491, 528, 597, 670
Leaving the hive..... 365
Lighting bee-smokers..... 376
Living hive in winter..... 791
London ear trumpet..... 339
Loss of prolificness..... 140

Manitoba honey..... 754
Manufactured honey..... 671
Marion county fair..... 170
Marketing honey..... 303, 310, 496, 500, 607, 635
Marshall's (Dr.) early bee-keeping..... 301
Mating from upper stories.....296, 375
Mating of queens.. 18, 145, 172, 176, 180, 206, 568, 636
Migratory bee-keeping.....300, 397
Milk-pan bee-feeders..... 635
Milkweed and milkweed honey.....45, 376, 561
Mineral wool for packing..... 490
Minnesota fair.....298, 424
Minnesota honey crop..... 425
Mismating of queen-bees..... 269
Mistakes of beginners..... 661
Mixed bees—preventing..... 408
Mixed farming and bee-keeping..... 568
Morning-glory honey..... 628
Moths kept out with salt..... 311
Moth-worms and black bees..... 502
Mullein for rheumatism..... 425

Nameless bee-disease..... 105
National flower of the United States..... 78
Nebraska State fair premiums..... 589
Neighbor visits in winter..... 788
Nesting fowls near bees..... 538
Non-swarming hives and self-hivers..... 244
Not bumble-bees..... 22
Noted apiarian visitors..... 148
Number of combs in winter..... 791
Number of eggs a queen lays per day..... 470

Occupations of insects, birds, etc..... 140
Old combs..... 539
Old or young bees that swarm..... 79
Old sections with undrawn starters..... 301
One field of 100,000 lilies..... 279

Opportunities in apiculture..... 860
Orange honey in California..... 575
Outlook for apiculture 602
Overstocking a locality with bees 236, 854

Packages for extracted honey 605
Paddock "pure food bill" 42, 796, 817, 850
Paint for hives.....330, 728
Paste for labels 149
Patent bee-hive men 40
Patents..... 335
Perfection in bee-culture 735
Personalities in conversation..... 215
Piping and quahking of queens.....21, 86, 182
Pleurisy-root 45, 241

POETRY—
Axe-covered grindstone..... 107
Beautiful May—that didn't come..... 407
Cast-away..... 241
Clouds..... 167
Clover blossoms..... 821
Current of life..... 691
Dissatisfied humanity 172
Golden-rod torches..... 638
Helpful though unconscious service..... 539
Honey-bee 523
Mrs. Wasp and Mrs. Bee 12
Month of August..... 268
October days..... 570
Seek not to walk 295
Some flower messages to all 491
Some old-fashioned flowers..... 342
Song of long ago..... 460
Song of the golden-rod..... 595
'Twixt sleep and working 298
Two sides on the farm..... 203

Poor seasons 359, 591
Poultry and bees..... 119
Predictions of the honey-flow.....406, 504
Preparing bees for winter 456, 660
Preparing honey for market..... 500
Preparing sections..... 540
Prevention of swarming 23, 276
Prime swarms..... 570
Producing sex at will..... 661
Prof. Cook's early bee-lessons 80
Profitable apiaries during a drouth..... 855
Progress in bee-keeping..... 561
Proof-reading queen-cells..... 494
Prophets and prophecies in bee-keeping..... 534, 535 665
Propolis on separators 80
Punic or Tunisian bees.....14, 138, 149, 171, 246, 272, 274, 336 766
Pulled queens 234
Pure honey and C. F. Muth & Son..... 404

Queen-excluders 211
Queen from Arkansas..... 85
Queen laying part drone and part worker eggs.. 724
Queenlessness..... 202
Queen questions 201
Queen-rearing.....429, 693
Queen-rearing dialogue.....396, 428, 461
Queens from old or young mothers..... 692
Queens from which to breed..... 693
Queens piping.....21, 86, 182
Queens producing three or more banded bees... 204
Queen trade 592
Questions by a beginner..... 207
Quieting bees when swarming 87

Races of honey-bees..... ....17, 531, 567
Raspberry honey..... 310
Rearing bees for the harvest..... 19
Rearing queens..... 533
Reliable honey-plants 855
Removing honey from hives.....142, 500, 607
Retaining drones..... 461
Reversing frames—effect on brood..... 494
Ripening honey..... 760
Robbing among bees 667, 731

Salt for bees.....183, 277
Salve 232
Sangamon Co., Ills., fair..... 360
Sealed covers and absorbents 170
Season of 1892—what I have learned....273, 761, 861
Scarcity of honey..... 391
Scientific ignorance about bees 433
Scouts among bees..... 337
Securing comb honey..... 696
Self-hiving arrangements...16, 39, 51, 53, 81, 113, 244 696
Several eggs or larvæ in a cell.....170, 433, 502, 724
Shade important for bees..... 87
Shading nuclei 597
Sheds for bees..... 207

Shipping bees.....54, 116
Shipping-cases—protection for..... 427
Shipping honey to market 458, 656
Side-tracked bee-keeper 343
Small bees 72
Small-pox..... 39
Small queen-cages 13
Smoke and smokers..... 787
Smoke for curing bee-stings..... 399
Some of the things "I don't know" about bee-keeping 495
Sour honey and adulteration..... 824
Southern Minnesota Fair 233
Space between hives 207
Spanish-needle honey 406
Spring management of bees 565
St. Joseph, Mo., fair.....202, 468
Standard of purity in bees..... 502
Standard sections..... 112
Stands for honey 73, 267
Starting an apiary.....656, 693
Starting bees in sections..... 13
Starved or sick bees..... 9
Statistics for 1892 856
Stealing eggs..... 180
Stewart honey-box..... 331
Storing comb honey 854
Storing water..... 430
Straw bee-hives..... 426
Stray Strawer of "Gleanings".....457, 722
Stray Straws..... 232, 626
Study of honey-producing flowers..... 440
Sugar food for bees in winter..... 634
Sugar honey.....265, 849, 861
Sumac 365
Supply factory burned..... 457
Surfeit among starved bees..... 114
Swarming.....46, 209, 338, 427, 696
Swarming without a queen..... 109
Swarm in Washington..... 168
Sweet corn..... 343

Taking bees from a house 765
Texas bee-notes..... 18
Tiering up..... 142
Tomato honey..... 817
"To scout" or not "to scout?"..... 336
Transferring bees 213, 337
Trip to historic Mackinac 371
Turning out brood 461

Under a church roof..... 398
Unfavorable season for experiments..... 274
Unfertilized queens and drone-eggs..... 139
Uniting bees with carbolic acid 439
Uniting colonies 311, 634, 696
Uniting nuclei by feeding..... 471

Value of apiarian knowledge..... 861
Verbena or vervain..... 732
Ventilation and wintering..... 625
Virgin queen progeny 760
Visiting colonies of bees.....529, 629
Visits among Iowa bee-keepers 15, 50, 148

Water for moths in combs..... 84
Wax-moth..... 179
Wax-palm..... 426
Weeds and grass in the apiary 268
What ails the bees?..... 214
Wheat and honey..... 860
Wheat turned to chess.....538, 608
When should honey be extracted?..... 366
When to begin breeding in spring..... 462
"Where ignorance is bliss," etc..... 797
White-ringed bees 244
Who is my neighbor?..... 55
Who'll accept the challenge?..... 440
Why do bee-keepers disagree?..... 143
Why clergymen should keep bees..... 403
Wiley (Prof.) and bee-keepers.....110, 231
Wintering bees.....236, 243, 465, 597, 668, 763
Winter quarters for bees..... 594
Winter stores.....536, 559, 700, 859
Woman's World's Fair committee 168
Work at Jackson Park..... 296
Work done by bees 624, 730
Worker-bee in a queen-cell.....763, 767

Yellow bands on Italian bees..... 80
Young attorney's first case 270
Young queens as drone-layers..... 110
Youthful bee-keeper's story..... 205

CORRESPONDENTS.

Aaron, Carrie B. 698
Abbott, Rev. E. T. 433, 468
Adams, Jno. D. 23
Adams, W. P. 504
Ahlers, H. C. 471
Allen, W. C. 504
Alley, Henry, 73, 81, 181
Allyn, Julia, 659, 789
Analyst Pub. Co. 75, 77
Anderson, Thos. A. 246
Anderson, Mrs. M. 830
Andre, J. H. 22, 53, 86, 502
Arnold, F. X. 182, 210
Aspinwall, N. P. 276
Atchley, Mrs. Jennie, 149, 202, 206, 213, 234, 300, 332, 365, 396, 397, 406, 428, 460, 461, 492, 528, 564, 596, 724, 754, 756, 787, 820
Aten, A. C. 18, 333, 628
Auringer, Geo. H. 671
Austin, Rev. A. B. 594
Axtell, Mr. & Mrs. L. C. 104, 719
Aylen, J. F. R. 789

Babb, A. C. 734
Baird, A. B. 151
Baker, Wm. H. D. 799
Baldridge, M. M. 117,473
Baldwin, P. 853
Baldwin, A. Y. 87
Ballmer, G. 309
Bankston, C. B. 529, 596, 597, 661
Barber, Ira, 821
Barclay, Wm. S. 567
Barnum, W. M. 265
Barrows, O. B. 308, 496
Baxter, E. J. 439
Beach, A. L. 627, 829
Bechly, F. 691, 763
Beeson, Mrs. A. 22
Beheler, B. F. 151, 246, 831
Bell, G. W. 278
Bell, J. C. 529, 629
Bellamy, Jas. R. 539, 862
Bennett, Dema, 815
Benton, F. 47, 141, 200, 369, 522
Bessey, Prof. C. E. 297
Biggers, C. T. 277
Bingham, T. F. 116
Bisher, A. 492
Bittenbender, J. W. 463, 466, 495
Blanken, J. H. 402
Bowdish, J. L. 691, 725
Bradford, A. E. 116
Brenner, C. W. 691
Bright, Wm. H. 471
Brodbeck, Geo. W. 560, 792, 797
Brooks, H. E. 721
Brooks, N. M. 235
Brown, H. H. 53
Buchanan, W. I. 170, 524
Buckmaster, C. L. 112, 269
Bunch, C. A. 627, 700
Burrill, T. J. 45
Burton, S. 116
Bushbaum, Henry, 670
Buzzer, 752

Cadwallader, D. A. 84, 472
Calhoun, A. O. 860
Camm, Wm. 183, 278
Carr, Wm. 104
Carroll, Dr. B. H. 408
Carswell, Rev. J. 403
Carter, P. P. 627
Cary, Alice, 295
Cary, Wm. W. 439
Chambers, L. T. 526
Chase, Frank P. 831
Chipman, C. E. 213
Clark Ed. 17, 54, 366
Clark, L. J. 47
Clark, Wm. 246
Clarke, Wm. F. 827
Clemmons, Noah, 733, 831
Cleveland, Geo. W. 408
Conder, Josiah, 241
Conklin, H. W. 830
Conser, Jno. 244, 689
Cook, Prof. A. J. 7, 9, 72, 105, 110, 264, 401, 423, 498, 624, 661, 663, 689, 721, 733, 861, 850
Cook, E. 528
Cormac, Jas. 202
Couvillon, G. O. 115
Couvillon, P. E. 246, 469
Coverdale, Frank, 271, 465, 536, 824
Cowan, Thos. Wm. 138
Cox, S. D. 797
Cram, M. F. 23
Creel, A. M. 213
Cromley, R. I. 180
Cutler, M. 298

Dadant, C. P. 751
Dadant & Son, Chas. 146
Davis, R. D., 23, 767
Davis, W. J. 1st, 761
Dayton, Mrs. F. O. 118
Delamarter, J. A. 310
Demaree, G. W. 17, 147, 273, 759
DeWitt, M. H. 13, 534
Dibbern, C. H. 39, 84, 113, 180, 236, 310, 540, 575, 688, 735
Dibble, Wesley, 16, 51
Doolittle, G. M. 13, 109, 170, 201, 296, 302, 440, 467, 532, 634, 668, 789, 791
Doolittle, M. A. 800
Douglass, W. S. 629
Downs, W. H. 574
Dowse, Thos. S. 565
Drane, E. 214
Draper, A. N. 533
Drone, 277
Duclos, Chas. 505
Dunbarr, Jos. 859

Efird, F. B. 597
Eggers, J. F. 207
Ehret, Jos. 214
Ellingwood, A. D. 525
Ellis, E. B 767
Enyart, J. E 861
Eskew, J. R. 213
Evans, Geo. F. 22
Everman, Jake, 862
Eversole, G. H. 798
Eytings, M. 12

Fairchild, Rev. Miller, 798
Falkner, Chas. E. 115
Fay, A. 182
Faylor, Rev. W. P. 8, 431, 608
Fee, W. A. 339, 406
Feazel, B. F. 4'6
Fisher, Jno. D. A. 269, 310, 636
Fitz Hart, H 242, 734
Flint, J. L 149
Fouts, J. W. 150
Frazier, W. C. 72, 110, 168, 203, 334, 497
Freeman, A. J. 797
Fritz, Wm. F. 212

Gates, Jno. F. 690
Golden, J. A. 20
Goldsborough, A. T. 375
Graden, Randolph, 763
Grant, Alex. 234
Green, J. A. 527, 624, 727, 752
Greening, C. F. 182
Greiner, F. 424, 440, 540
Gress, Dr. P. C. 729, 732
Grover, Irvin, 667
Gunn, E. 21

Hachenberg, G. P. 538
Haeger, Jno. F. 72, 86
Hager, Jr., Jno. 149
Hahman, F. 525
Hall, D.D., Jno. 215
Hambaugh, Hon. J. M. 436, 751
Hamilton, Jas. 374, 608
Hamilton, M. M. 466
Hansen, A. 489
Harmer, W. 309
Hart, F. M. 214, 242
Hart, W. S. 397
Harrison, Mrs. L. 19, 87, 236, 311, 343, 376, 408, 500, 601, 703, 816, 821
Harvey, Robt. 117
Haskins, Jno. 277
Hastings, M. E. 638
Heckman, G. S. 766
Heddon, James, 241
Hegler, Lawson, 84
Henderson, Mrs. J.C. 797
Henry, F. 311
Hentrick, F. 150
Hepler, W. H. 247
Hershiser, Orel L. 766
Hewes, Wm. G. 242
Hill, A. G. 11, 74, 753
Hilton, Geo. E. 151, 606, 723
Holley, Chas. E. 54
Holtermann, R. F. 277, 503
Hopkins, R. 375
Housel, Wm. 40, 149
Hovey, E. S. 53
Howe, Mrs. O. G. 118
Hubbard, J. L. 848
Hutchinson, W. Z. 10, 135, 136, 167, 171, 200, 231, 263, 279, 304, 432, 571, 591, 599, 631, 754, 786, 823
Hyer, A. 406

Isham, H. B. 183

Jameson, A. E. 208. 504, 763
Johnson, D. J. 468
Johnson, O. H, 213
Johnson, Thos. 15, 21, 50, 151, 303, 535
Jones, A. H. 694
Jones, D. A. 11
Jowett, Philander, 562
Judd, Jas. S. 329
Judd, Orange, 382
Judkins, M. D. 85, 247. 335

Kauffman, E. B. 565, 828
Kenmuir, Mrs. Wm. 817
Kirby, T. 276
Kirkland, Jos. 233
Knapp, H. H. 246
Knight, H. 701
Knox, Jno. W. 852

Lang, C. F. 9
Langstroth, Rev. L. L. 14, 173, 238, 339, 404
Larrabee, J. H. 42, 106
Lasby, B. 214
Latham, J. F. 368
Lattner, Mrs. P. 624
Law, B. W. 273
Leggott, A. 79
Letot, D. 374
Limes, Milton, 19
Lindbeck, D. 201, 490, 527
Lindersmith, S. 310
Lockhart & Co. F. A. 214
Lower, C. 243
Lyon, W. W. 306

Mackintosh, R. S. 150
Mallory, S. H. 767, 798
"Malta," 46, 179, 334, 535 698
Mann C. V. 277, 300, 504
Manning, F. R. 437
Marsh, C. A. 439
Marshall, Rev. W. K. 301
Martin, W. W. 831
Mason, Dr. A. B. 719
Mason, Jos. 247
Massie, T. K. 118
Mead, C. E. 85, 118, 327, 336, 368
Merrill, J. F. 862
Michael, J. F. 627
Miles, E. S. 435
Miller, Dr. C. C. 41, 86, 142 182, 207, 208, 232, 234, 3 0, 456, 491, 626, 699, 751
Miller, J. W. 244, 670
Miller, O. P. 575
Miller, S. E. 73, 176, 502, 857
Millier, W. F. 86
Mitchell, Jno. 730
Moeser, F. 504
Montague, C. A. 18, 182, 561
Moore, I. N. 247
Moore, J. 105, 733
Murray, C. H. 376
Muth, C. F. 78, 211
McConnell, G. W. 276
McCormick, Wm. B. 756
McEvoy, Wm. 666
McFatridge, P. W. 85
Mcintyre, J. F. 327
McKeon, Jno. 296, 374
McKinnon, C. P. 272
McNally, W. 340
McNiven, F. 426

Nance, G. W. 471, 671, 631
Newman, J. C. 212
Newman, Thos. G. 40, 41, 329, 395, 697, 785, 850
Nichol, T. B, 21
Norton, P. L. 10
Nutting, Fred L. 691
Nyhuise, Arend, 733

Oglesby, Jno. W. 22
Olin, Mrs. R. A. 117
Olmstead, Chester, 215
Olmstead, Mrs. C. H. 168
Osborn, A. K. 624
Otley, Jno. 118
Ozburn, S. F. 375

Partlow, Jas. F. 136
Patten, Rev. A. W. 55
Patterson, A. J. C. 136
Peterson, J. W. 150
Pike, Edwin, 234
Pitman, J. E. 671
Pitzer, E. W. 309
Plummer, S. 817
Poindexter, Geo. 117, 182 539, 629
Pond, C. H. 54
Pond, Jos. E. 41
Posey, L. 45
Pratt, J. M. 73, 85
Prichard, J. E. 83, 337, 570, 731
Pryal, W. A. 278, 761, 794 826
Quigley, E. F. 537

Ragon, W. M. 182
Ramage, J. B. 406
Rambler, 343
Raugut, A. P. 170
Rebholz, M. 341
Reed, L. G. 861
Reeves, Ira, 795
Replogle, G. B. 539
Reynolds, Chauncey, 691
Rice, Edwin, 245
Rich, A. J. 608
Richardson, F. H. 21, 150 406, 635
Riedinger, J. P. 724
Robinson, C. J. 400, 605, 698, 825
Roese, Rev. S. 243, 267
Root, A. I. 8, 135, 171, 199 201, 264, 490
Root, E. R. 10, 144, 200, 265, 359, 360, 766, 783
Rupe, J. W. S. 347
Rupp, Jno. H. 310, 505
Rusbridge, Alfred, 106

Saylor, A. 361, 523, 797
Scaumacker, Louise, 54
Scott, H. W. 87, 247
Scruggs, W. M. 149, 310, 701, 725
Seckman, Chas. 309
Secor, Eugene, 112, 200, 464, 531, 639
Seiler, Jno. M. 209, 798

Sherman, L. J. 214
Shigley, A. P. 199
Shirer, G. R. 574
Shirk, J. F. 440
Shultz, N. W. 53, 439
Shultz, R. A. 338, 670
Simpson, A. A. 85
Smith, A. W. 342
Smith, Edw. 438, 831
Smith, Jas. M. 151
Smith, L. K. 820
Smith, S. B. 338
Spitler, Geo. 695
Stahl, E. 276
Staley, H. 370
Steddom, Mrs. W. C. 104
Stewart, E. H. 341
Stewart, H. 266
Stilson, L. D. 569
Stolley, Wm. 826
Stone, Jas. A. 359, 487
Stoner, J. E. 505
Stout, S. 375, 627
Stow, Mrs. N. L. 602
Strickland, C. L. 20, 470, 637, 728, 785, 793
Strong, E. 114, 399
Strong, J. L. 277
Subscriber, 117
Swigart, Carrie L. 537

Tarey, Chas. 574
Tate, W. R. 342
Taylor, B. 87, 425, 594
Taylor, Joshua, 569
Taylor, J. W. 429
Theilmann, C. 143, 733
Thompson, Elihu, 74
Thurlow, Thos. 636
Tinker, Dr. G. L. 41, 205
Townley, J. W. 80, 140, 439
Tracy, D. L. 734
Trego, S. F. & I. 342
Tufts, Dr. A. W. 568
Turnbull, Jno. 116
Tyrrel, A. C. 270

Vance, J. W. 786
Van Doren, H. 213
Vought, Albert, 732

Watkins, S. L. 832
Webb, Wm. 439, 471
Webster, D. G, 375
Wheeler, Geo. S. 145
White, W. H. 429, 597
Whiteside, R. F. 767
Whipple, E. B. 788
Wickersham, Thos, 213
Wilcox, F. 500
Wiley, Prof. H. W. 40, 77, 232
Wilgus, J. L. 11
Wilkins, C. W. 49
Wilkins, O. F. 209, 818
Williams, R. H. 85, 336, 721
Wilson, C. N. 107, 140, 275, 703
Wilson, D. C. 608
Wilson, Emma, 55, 80, 307, 376
Wilson, Henry, 41
Wilson, I. P. 54
Wilson, Sam. 175, 407, 665
Wolcott, Wm. C. 798
Wolf, G. I. 23
Wong Lung, 858
Wood, Jas. F. 367
Woodward, R. B. 575
Wooldridge, C. H. 83

Yocom, C. E. 605
York, Geo. W. 574

Zinn, C. C. 472
Zoll, C. 118

Convention Notices.

INDIANA.—The Indiana State Bee-Keepers' Association meet at Indianapolis, Ind., on Jan. 18 and 19, 1893. G. P. WILSON, Sec.
Tolgate, Ind.

ONTARIO, CAN.—The annual meeting of the Ontario Bee-Keepers' Association will be held in Walkerton. Ont., on Jan. 10, 11 and 12th, 1893. All interested in bee-keeping are cordially invited to be present.
Streetsville, Ont. W. COUSE, Sec.

COLORADO.—The Colo. State Bee-Keepers' Association will hold their annual meeting in Denver, on Jan. 16 and 17, 1893. Election of officers and other important business will come before the meeting.
Littleton, Colo. H. KNIGHT, Sec.

MINNESOTA—.The annual meeting of the Minnesota Bee-Keepers' Association will be held at Minneapolis, on Thursday, Friday and Saturday, Jan. 12, 13 and 14, 1893. The Thursday meeting will probably be a union meeting with the Horticultural Society which meets at the same place, commencing on Tuesday. A. K. COOPER, Sec.
Winona, Minn.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary. Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, December 24th, 1892:

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c., according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, ILLS.—Considerable honey coming in. Fancy stock for Holidays will bring fancy price. White comb now selling 16@17 cts., with dull market owing to mild weather. Extracted holds firm 8@9c. for fancy; 7c. for dark.
Beeswax—23@25c. J. A. L.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C.-M. C. C.

CINCINNATI, OHIO.—Demand is good for honey, with scant supply of all kinds. Extracted brings 6@8c., and comb sells at 14@16c. for best white. Although honey is scarce, there is no demand for dark comb.
Beeswax—Demand good, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS.—Comb honey is selling slow, very much slower than we like to have it, and it is our experience that when we start honey in at a high price, it sells hard right through the season. We quote our market nominally at 17@18c. for best white honey, 1-lb. combs. Extracted, 8@9c.
Beeswax—None on hand. B. & R.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

NEW YORK, N. Y.—Our market is quiet. Arrivals are freely, and the demand limited. We quote: Fancy white, 1-lbs., 15@16c.; 2-lbs., 12@13c. Fair white, 1-lbs., 12@13c.; 2-lbs., 11c. There are large stocks of buckwheat honey on our market, and we know of two lots of fancy 1-lbs. that sold at 8 and 9c. per lb., respectvely. We quote 1-lbs., glassed or in paper-boxes, 10c.; unglassed, 9c. Extracted is in good demand at 8@8½c. for basswood and white clover; 6@6½c. for buckwheat; 70@75c. per gallon for Southern.
Beeswax—Dull at 25@27c. H. B. & S.

ALBANY, N. Y.—Honey market some quieter and prices some easier. White clover, 15@17c.: mixed, 14@15c.; dark, 10@11c. Extracted, white, 8@8½c.; mixed, 7@7½c.; dark 7c. Stocks light of both comb and extracted.
Beeswax, 27@28c. H. R. W.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. BURNETT, 161 South Water Street.
J. A. LAMON, 44 & 46 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

STEWART & ELLIOTT, 22 Bridge Square.
J. A. SHEA & CO., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati Ohio.

C. F. MUTH & SON, cor. Freeman & Central ave.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer to to give it, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you bound in paper, as a present.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED—A good Second-Hand Well-Drill. Give description, and lowest cash price. ALFRED SOPER,
26A3t Eau Claire, Wis.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas

Advertisements.

HATCH CHICKENS BY STEAM
WITH THE IMPROVED
EXCELSIOR INCUBATOR.

Thousands in Successful Operation. *SIMPLE, PERFECT, and SELF-REGULATING.* **Guaranteed to hatch a larger percentage of fertile eggs at less cost, than any other Incubator.** Send 6c. for Illus. Catalog. Circulars Free.

GEO. H. STAHL, Pat. & Sole Mfr., Quincy, Ill.

21D13 *Mention the American Bee Journal.*

Fruit-Growers' Journal

Is a recognized authority on
Practical fruit-growing,
Market-gardening and every
Branch of the business as connected
With the fruit and vegetable industry.
Its columns contain articles from the
BEST-INFORMED GROWERS
In this country.

It is a six-column, eight-page, all-around fruit-growers' journal. It is published semi-monthly. The regular subscription price is $1 a year; but to every NEW subscriber received before the 15th of OCTOBER next, the JOURNAL will be sent one year for 50 CENTS. Send for free sample copy.

A. M. DuBOIS, Editor and Publisher,
7D10t COBDEN, ILLINOIS.

DR. WINCHELL'S
TEETHING SYRUP

Is the best medicine for all diseases incident to children. It regulates the bowels; assists dentition; cures diarrhœa and dysentery in the worst forms; cures canker sore throat; is a certain preventive of diphtheria; quiets and soothes all pain, invigorates the stomach and bowels; corrects all acidity, will cure griping in the bowels and wind colic. Do not fatigue yourself and child with sleepless nights, when it is within your reach to cure your child and save your own strength.

Sold by all druggists. Prepared only by the
EMMERT PROPRIETARY CO., CHICAGO.

17D26t *Mention the American Bee Journal*

10 DAYS FREE TRIAL in your own home. First class Sewing Machines shipped anywhere to anyone at wholesale prices. All latest improvements. Standard Singer Machines, $9.50 to $15.50 $50 Arlington Sewing Machine for $19.50 $60 Kenwood Sewing Machine for $22.50 Warranted for five years. Complete set of attachments FREE. Send for catalogue CASH BUYERS' UNION, 160 W. Van Buren St. B 118 Chicago.

9D26t *Mention the American Bee Journal.*

Send 50 Cents For my Book, entitled—"A Year Among the Bees," 114 pages, cloth bound. Address

DR. C. C. MILLER,
Atf MARENGO, ILL.